

REMARKS

Applicant has carefully reviewed and considered the Final Office Action mailed on June 27, 2008 and the references cited therein. Applicants have not amended, canceled or added any claims. The claims in the present application are pending as originally filed in the application on February 19, 2004. Accordingly, claims 1-9 remain pending in the application of which claims 1, 8 and 14 are independent.

Improper Finality of June 27, 2008 Office Action

For the reasons discussed below, Applicant respectfully submit that the finality of the June 27, 2008 Office Action was improper. Applicants noted this impropriety in a response filed on September 25, 2008, which requested withdrawal of the finality of the June 27, 2008 Office Action. The remarks in Applicants' September 25, 2008 response apparently have not been considered by the Patent Office, as no Advisory or additional Non-Final Office Action have been issued.

Because, for the reasons discussed below (and in Applicants' September 25, 2008 response), the finality of the June 27, 2008 Office Action was improper, issuance of a Final Office Action in response to the concurrently filed RCE (and this response) would likewise be improper because Applicants have not been provided an opportunity to respond to the currently outstanding rejections in a properly issued non-final Office Action under MPEP § 706(a). Further, Applicants reserve the right to file a request for a refund of the RCE fees filed herewith, as filing an RCE would be unnecessary at this point in the prosecution were it not for the improper finality of the June 27, 2008 Office Action and the fact the Patent Office failed to withdraw the finality of that rejection.

The June 27, 2008 Office Action stated, on page 17, that "Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a)." However, Applicants **did not** submit any amendments in their previous Response, filed on March 19, 2008 (not April 17, 2008 as noted on page 17 of the Office Action). Rather, Applicants only submitted arguments in traversing the rejection of claims 1-19 under 35 U.S.C. § 102. In fact, Applicants did not even submit a copy of the claims with their March 19, 2008 Response since the claims were not being amended in that response.

Applicants note that MPEP § 706.07(a), cited in the Office Action, states that "second or any subsequent actions on the merits shall be final, **except** where the examiner **introduces a new ground of rejection** that is neither **necessitated by applicant's amendment** of the claims, **nor based on information submitted in an information disclosure statement filed during the period set forth in 37 CFR § 1.97(c)** with the fee set forth in 37 CFR § 1.17(p)" (MPEP § 706.07(a), emphasis added). In addition to the fact that Applicants did not amend the claims in

their March 19, 2008 response, neither reference cited in the June 27, 2008 Office Action was submitted in an IDS filed during the time period set forth in 37 C.F.R. § 1.97(c). The primary reference, the '229 patent to Kadambi et al., was cited by the examiner in the December 26, 2007 Office Action and the secondary reference, the '985 patent to Goyal, was cited by the examiner in the June 28, 2008 Office Action. Therefore, the rejection of claims 1-19 under 35 U.S.C. § 103 in the outstanding Office Action constitutes new grounds of rejection that were not necessitated by Applicants. Accordingly, because the June 27, 2008 Office Action introduced a new rejection that was not necessitated by Applicants' amendments to the claims or an IDS, it is respectfully requested that the finality of the outstanding Office Action be withdrawn and a new **Non-Final Office Action** be issued.

The June 27, 2008 Office Action also stated on page 17 that "Applicant's arguments filed on 4/17/2008 have been fully considered but they are deemed moot in view of the new grounds of rejections [sic]." However, while Applicants presented arguments on pages 4 and 5 of their previous Response (actually filed March 19, 2008, not April 17, 2008) stating that "determining whether the other network devices have learned the source address when the source address has been learned previously" as recited in independent claim 1 is not disclosed or suggested by Kadambi et al., the June 27, 2008 Office Action repeated the same grounds of rejection for these features on page 3, without addressing Applicants' clear traversal, in their March 19, 2008 response.

37 C.F.R. § 1.104(b) states that an Office Action must be complete as to all matters. MPEP § 707.07(f) further states that "[i]n order to provide a complete application file history and to enhance the clarity of the prosecution history record, an examiner **must** provide clear explanations of all actions taken by the examiner during prosecution of an application." (Emphasis added) "Where the applicant traverses any rejection, the examiner should, if he or she repeats the rejection, take note of the applicant's argument and answer the substance of it." (*Id.*) "The examiner must address all arguments which have not already been responded to in the statement of the rejection." (MPEP § 707.07(f), Examiner Note 1). Accordingly, Applicants respectfully submit that the finality of the June 27, 2008 Office Action is further improper on this basis and should be withdrawn.

Claim Rejections – 35 U.S.C. § 103

In the Office Action, claims 1-19 were rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over U.S. Patent No. 6,560,229 to Kadambi et al. (hereafter “Kadambi”) in view of U.S. Patent No. 6,466,985 to Goyal (hereafter “Goyal”). Applicants respectfully traverse the rejection.

It is well settled that in order to establish a *prima facie* case of obviousness (unpatentability) based on multiple references, it must be shown that, when combined, the references disclose every element of the rejected claims. Because Kadambi and Goyal, alone or in combination, fail to disclose every element of the rejected claims, Kadambi and Goyal fail to render claims (1-19) of the application obvious.

For instance, independent claim 1, from which claims 2-7 depend, recites a method of handling datagrams in a network device coupled to other network devices, including receiving an incoming datagram at a port of the network device, determining an egress port for the incoming datagram based on a destination address contained in the incoming datagram and a lookup of an address resolution lookup (ARL) table, and performing a lookup of the ARL table based on a source address contained in the incoming datagram to determine whether the source address has been learned previously. The method also includes writing an entry into the ARL table when the source address has not been learned previously, determining whether the other network devices have learned the source address when the source address has been learned previously, and continuing to relay a learning message with the source address to the other network devices when it is determined that the other network devices have not learned the source address.

Independent claim 8, from which claims 9-13 depend, recites a network device coupled to other network devices for handling datagrams, including a plurality of ports for receiving an incoming datagram, an address resolution lookup (ARL) table, and means for determining an egress port for the incoming datagram based on a destination address contained in the incoming datagram. The network device also includes lookup means for performing a lookup of the ARL table based on a source address contained in the incoming datagram to determine whether the source address has been learned previously, writing means for writing an entry into the ARL table when the source address has not been learned previously, determining means for determining whether the other network devices have learned the source address when the source

address has been learned previously, and relaying means for relaying a learning message with the source address to the other network devices when it is determined that the other network devices have not learned the source address.

Independent claim 14, from which claims 15- 19 depend, recites a network device coupled to other network devices for handling datagrams, including a plurality of ports for receiving an incoming datagram, an address resolution lookup (ARL) table, an egress port determiner for determining an egress port for the incoming datagram based on a destination address contained in the incoming datagram, and an ARL table reader for performing a lookup of the ARL table based on a source address contained in the incoming datagram to determine whether the source address has been learned previously. The network device also includes an ARL table writer for writing an entry into the ARL table when the source address has not been learned previously, a global address determiner for determining whether the other network devices have learned the source address when the source address has been learned previously, and a learning message forwarder for relaying a learning message with the source address to the other network devices when it is determined that the other network devices have not learned the source address.

As discussed below, Kadambi and Goyal, both individually and in combination, fail to disclose all of the features of the presently pending claims.

Kadambi generally discusses a “switching architecture in an integrated, modular, single chip solution, which can be implemented on a semiconductor substrate such as a silicon chip.” (Column 1, lines 20-23). A method as discussed in Kadambi includes:

[R]eceiving an incoming packet at a first port, then reading a first packet portion, less than a full packet length, to determine particular packet information. The particular packet information includes a source address and a destination address. The particular packet information is compared to information contained in a lookup table. If a match is made, the packet is modified to include appropriate forwarding and routing information based on the matching entry. The packet is then sent on a communication channel to a selected memory buffer. If there is no match, the particular packet information is learned and placed as a second entry in the lookup table. The packet information is modified to indicate that the packet is to be sent to all ports on the network switch. The packet is then sent to the selected memory buffer. The packet is then retrieved from the selected memory buffer, and sent to appropriate destination ports as indicated in the modified packet information. (Column 3, lines 17-33 of Kadambi).

Goyal generally discusses “a method and apparatus for providing quality of service using the Internet Protocol (IP).” (Column 1, lines 17 and 18).

A packet for the information is generated at a first network device such as an end system. The first network device assigns a flow label to the packet. The flow label indicates that the packet is part of a particular sequence of packets. The first network device also assigns a direction to the packet by, for example, setting a bit in the flow label. The packet is then sent to a second network device (e.g., another end system) through at least one intermediate network device (e.g., a router or switch). This process is continued for the entire sequence of packets for a given flow. (Column 2, lines 17-26, of Goyal).

Independent claim 1 recites, in part, “determining whether the other network devices have learned the source address when the source address has been learned previously.” Independent claims 8 and 14, which each have their own scope, recite similar features. The Office Action took the position on page 3 that column 3, lines 15-30, of Kadambi disclose these features. Applicants respectfully disagree.

The cited section of Kadambi discusses that “[t]he particular packet information includes a source address and a destination address” (column 3, lines 19-21). However, while packets in Kadambi may contain a source address, nothing is cited or found in Kadambi that discloses that it may be determined whether **other network devices have learned the source address**, as recited in each of the independent claims. By way of example, the present specification discusses that, in some embodiments:

After the destination address lookup, the receiving port will also perform a source address lookup. This procedure is performed so that the network device can learn the port/ MAC address mapping relationship. If the source address lookup fails, that implies that the source address has not yet been learned. The receiving port will then update the Address Resolution Lookup (ARL) table with this source address and receiving port number. Therefore, later on, if another port receives a frame with a destination address equal to this source address, the other port will know the destination port. If the source address lookup produces a match, the receiving port will update the hit bit of that entry. The hit bit is used for aging purposes and is not discussed in detail herein. After the source address is learned, the receiving port will send a frame to the other linked network devices, so that other network devices can also learn this MAC address. (See, for example, paragraph [0025]).

In other words, the source address itself may be used to determine whether a source address has been learned by other network devices. In some embodiments, whether the source address has

been learned by other network devices is determined by using the source address to perform a source address lookup.

On the other hand, Kadambi merely discusses that a packet contains a source address. There is no determination as to whether other network devices are aware of the source address in Kadambi. As such, Kadambi's mere mention of a source address is insufficient to disclose the above-recited features of claim 1. Further, nothing is cited or found in Goyal that cures the above deficiencies of Kadambi.

Independent claim 1 also recites, in part, "continuing to relay a learning message with the source address to the other network devices when it is determined that the other network devices have not learned the source address." Independent claims 8 and 14, which each have their own scope, recite similar features. The Office Action conceded on page 3 that Kadambi does not disclose these features. Rather, the Office Action relied on Goyal to cure these deficiencies of Kadambi. Applicants respectfully submit that Goyal also fails to disclose these features.

In making the rejection, the Office Action on page 4 copied and pasted column 4, lines 46-67, of Goyal. The cited section of Goyal discusses that:

There are four aspects of constructing a flow: (1) declaring a name; (2) pinning the route, (3) enabling reverse path routing, and (4) assigning attributes (such as QoS). Abstractly, current network nodes maintain two tables, a routing table and a forwarding table. In the case of a traditional router the forwarding table corresponds to the routing cache. On an ATM switch or an MPLS Label Switch Router (LSR), the forwarding table is respectively the Virtual Channel (VC) lookup table or the label lookup table. To support the flows used in the embodiments of the invention, a traditional router would be augmented with an additional forwarding table for mapping flow names to flow state (including the output port), as discussed in more detail with reference to FIG. 2.

A flow request may be interpreted as an implicit request for route pinning. If not, route pinning may be requested subsequently in a separate message. Without route pinning, the entry in the flow cache simply points to the corresponding entry (in the regular cache) for the destination address. When route pinning is requested this entry is copied and thus becomes independent of changes in the default destination based route. (Column 4, lines 46-67).

However, there is nothing in the cited section of Goyal that discloses continuing to relay a learning message with the source address to the other network devices when it is determined that the other network devices have not learned the source address, as claimed. In fact, the term "source address" does not even appear in the cited section of Goyal.

Further, Applicants respectfully submit that the combination of Kadambi and Goyal in the Office Action is an exercise of impermissible hindsight. MPEP 5 2142 states that “[t]he tendency to resort to ‘hindsight’ based upon applicant’s disclosure is often difficult to avoid due to the very nature of the examination process. However, impermissible hindsight **must be avoided** and the legal conclusion **must be reached on the basis of the facts gleaned from the prior art.**” (Emphasis’ added). In the present case, the Office Action merely offered the conclusory assertion that it would allegedly have been obvious to combine the claimed features without offering any reasoning gleaned from Kadambi and/or Goyal as to why this would allegedly have been the case. Further, these features clearly come from claim 1 of the present application rather than from the knowledge of one of ordinary skill in the art.

Without addressing the remarks in made in the Office Action with respect to claims 2-7, 9-13 and 15-19, it is noted that these claims depend from independent claims 1, 8 or 14 and add further features thereto. Thus, the arguments above with respect to the independent claims also apply to the dependent claims. Accordingly, claims 2-7, 9-13 and 15-19, by virtue of their dependence on claims 1, 8 or 14, are also not rendered obvious by Kadambi in view of Goyal.

Based on the foregoing, Kadambi and Goyal, alone or combination, fail to disclose all of the features of the rejected claims. Accordingly, it is respectfully submitted that the rejection is improper and should be withdrawn.

Conclusion

Applicant believes that all the application is condition for examination on the merits and respectfully requests such examination. The Examiner may telephone Applicant's attorney (360-930-3533) to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 50-3521.

Respectfully submitted,

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